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ABSTRACT

During the summer of 1973, two workshops were held to increase the competency of agriculture teachers in Mississippi in new and emerging areas of agribusiness and natural resources. One workshop focused on planning programs in the new areas of the pesticide industry, agribusiness economics, agribusiness management, environmental protection, rural development and land use planning, and agricultural products and processing. Included in the report are synopses of the presentations made in each of these areas by the participating resource persons. The second workshop focused on summarizing and coordinating needed curriculum improvements in agricultural education. Project objectives, activities, and outcomes are briefly discussed. Outlines of the workshop agendas are attached, along with a participant data summary sheet and the budget and financial report. (NJ)

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ED124748

FINAL REPORT

EPDA Sub-Project Number 002525-(AG-4)

Workshops for Developing Competency of Instructors in New and Expanding Areas of Curriculum in Agribusiness and Natural Resources

EPDA Sub-Project in Vocational Education
Conducted Under
Part F of Public Law 9035

Tom E. Ellis, Project Director
Mississippi State Board for Vocational Education
P. O. Box 771
Jackson, Mississippi

August, 1973

CE007364

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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FINAL REPORT

EPDA Sub-Project Number 002525-(AG-4)

Workshops for Developing Competency of Instructors in New and Expanding Areas of Curriculum in Agribusiness and Natural Resources

The project reported herein was performed pursuant to a grant provided through the National Center for Improvement of Educational Systems, Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Tom E. Ellis, Project Director
Mississippi State Board for Vocational Education
P. O. Box 771
Jackson, Mississippi

August, 1973

VT 102 873

Period Covered July 1 - August 15, 1973

Project Objectives*

The overall objective of this project was to increase the competency of secondary and post-secondary agriculture teachers in new and emerging areas of agribusiness and natural resources. This was accomplished through the following objectives:

Phase One. The primary objective in Phase One was:

To involve 12 secondary teachers and 12 local secondary school administrative personnel in a five-day workshop designed to develop competencies in establishing and conducting programs in new and emerging areas of agribusiness and natural resources.

In order to achieve the primary objective in Phase One of the project, the following specific objectives were designed:

1. To acquaint project participants with new and emerging areas of agribusiness and natural resources.

2. To train project participants in the development of curriculums to meet local needs for new and emerging areas of agribusiness and natural resources.

3. To train project participants in the techniques of establishing programs of instruction for new and emerging areas of agribusiness and natural resources.

4. To acquaint project participants with the procedures for providing realistic and meaningful occupational experiences.

* This report covers only Phase One of the project and was prepared to supplement a previous report prepared for Phases Two and Three.

Project Activities

The activities described below were conducted as a part of Phase One of this project. This description will indicate that some departure was made from the original plan for Phase One, as specified in the objectives. The staff viewed the departure as very beneficial, if not almost essential. Briefly, the departure consisted of conducting a short workshop to follow up this project and the other projects conducted for agricultural education personnel in fiscal year 1973. Instead of Phase One consisting of one workshop, as described in the objectives, it consisted of two workshops. For simplicity these will be described as "Workshop One" and "Workshop Two."

Workshop One

Workshop One focused on planning programs of agribusiness and natural resources education in new and emerging areas. Twelve agriculture teachers and two local school administrators participated. The small number of local school administrators participating was attributed to the busy schedules of those invited to attend. All who were invited to participate indicated an interest in attending but were prevented from doing so because of prior commitment. Participants in the workshop are listed below:

Bobby Gene Walley, Agriculture Teacher, Leakesville
Charles Hand, Agriculture Teacher, Meridian
A. L. Anderson, Agriculture Teacher, Shannon
Charles Stuckey, Agriculture Teacher, Columbia
John W. Jones, Agriculture Teacher, Philadelphia
Phillip Waycaster, Agriculture Teacher, Leland
Charles Stokes, Agriculture Teacher, Louisville
N. H. Riddell, Agriculture Teacher, Corinth
James G. Spencer, Agriculture Teacher, Avon
M. S. Stevens, Agriculture Teacher, Lucedale
Jimmy Newman, Agriculture Teacher, Maben
B. T. Hathorn, Agriculture Teacher, Louisville
Jerry Webb, Director, Louisville
J. A. Ashley, Director, Columbus

The workshop covered a period of four days and was structured around the use of qualified resource persons who were competent in new and emerging areas of agribusiness and natural resources. The project staff participated in identifying the new and emerging areas which should be included. These areas were as follows: the pesticide industry, agribusiness economics, agribusiness management, environmental protection, rural development and land use planning, and agricultural products/processing. Resource persons were selected by the staff to make presentations in these areas.

Upon completion of the presentations in the new and emerging areas, discussion was focused on planning programs of instruction to meet the needs of students in these areas. This involved presentations by teacher educators and small group discussions by workshop participants. Each small group prepared a report which was given to all participants during the final session of the workshop.

The agenda for the workshop was as follows:

AGENDA

Workshop on Planning Programs of Agricultural Education in
New and Emerging Areas of Agribusiness
July 9-12, 1973
Mississippi State University

July 9, 1973 - First Session (1:00 - 5:00 p.m.)

1:00	Introduction and purpose	-	Dr. Jasper S. Lee
	Welcome	-	Dr. James E. Wall
	Details of Workshop and Travel	-	Dr. Jasper S. Lee
	Status of Agricultural Education as Related to New and Emerging Areas of Agriculture	-	Dr. Jasper S. Lee
	Remarks	-	Mr. G. G. Powell Mr. B. B. Robbins
2:15	Break		
2:30	Survey of New and Emerging Areas in the Pesticide Industry	-	Dr. Clyde Sartor
5:00	Adjourn		

July 10, 1973 - Second Session (8:30 - 11:45)

8:30	Survey of New and Emerging Areas in Agribusiness from the Perspective of an Agricultural Economist	-	Dr. Tom Foster
10:00	Break		
10:15	Survey of New and Emerging Areas in Agribusiness from the Perspective of an Agribusinessman	-	Mr. Paul Cheek
11:45	Lunch		

Third Session (1:00 - 5:00)

1:00	Survey of New and Emerging Areas in Environmental Protection	-	Dr. David E. Wesley and Dr. George A. Hurst
2:45	Break		
3:00	Survey of New and Emerging Areas in Rural Land Use Planning and Development	-	Dr. Fred Tyner
5:00	Adjourn		

July 11, 1973 - Fourth Session (8:30 - 11:45)

8:30	Survey of New and Emerging Areas in Agricultural Products/Processing	-	Dr. Joe Cardwell Mr. Charles Shannon
10:00	Break		
10:15	Survey of Specialized Interests in New and Emerging Areas of Agriculture		

Fifth Session (1:00 - 5:00)

1:00	Program Planning in Agricultural Education for New and Emerging Areas in Agriculture	-	Dr. W. F. Jackson Dr. O. L. Snowden
2:45	Break		
3:00	Small Group Discussions on Planning Programs for New and Emerging Areas in Agriculture		
5:00	Adjourn		

July 12, 1973 - Sixth Session (8:30 - 11:45)

8:30	Continuation of Small Group Discussions		
10:00	Break		
10:15	Reports from Small Group Discussions		
	Workshop Summary Workshop Evaluation	-	Dr. Jasper S. Lee
11:45	Adjourn		

Synopses of the presentations made by the resource persons are presented on the following pages.

Survey of New and Emerging Areas in the Pesticide Industry. Dr. Clyde Sartor, Entomologist with the Cooperative Extension Service, Mississippi State University, discussed the new and emerging areas in the pesticide industry. His presentation focused on new developments in cotton insect control and regulations on the use of pesticides. A synopsis of his presentation follows.

Cotton insect control is the most important area of pesticide usage in Mississippi. Three methods, or techniques, are being used: scouting, selective use of pesticides, and integrated control. Scouting involves sampling the population of insects in a field and estimating population size on the basis of the sample. The use of insecticides involves selecting the recommended insecticide, using proper application techniques, and timing the application correctly. Factors affecting the selectivity of an insecticide include (1) dosage, (2) formulation, (3) time of application, and (4) method of application.

Several new insect problems are beginning to appear. The greatest threat is posed by the tarnish plant bug which feeds on the terminal bud of cotton plants and secretes an enzyme into the plant which delays fruiting or causes the growth of extra branches and low fruiting. The tarnish plant bug may become the greatest insect problem in cotton production if the boll weevil is controlled. Other insects which may cause increased problems in Mississippi are the cotton boll worm and white fly.

Research in areas of pesticide control results in new control procedures and information for decisions by management. "Economic threshold" is explained as being the density at which control measures should be determined to prevent an increasing pest population from reaching the economic injury level. Current management schemes include the planting of crop strips, such as alfalfa or sorghum, in cotton fields. Boll weevil diapause control programs have proven effective. Bulk storage facilities for storing and transporting pesticides are coming into use.

The largest experiment in insect control ever attempted is currently underway in south Mississippi and parts of Alabama and Louisiana. This experiment is focused on the eradication of the boll weevil and is making use of a number of control techniques. Some of the techniques used include the use of sex attractant traps, sterilization of male weevils, insecticides, and diapause programs. This experiment is also focusing on the effects of cotton insecticides on other insects and wildlife.

New regulations are being imposed on the use of pesticides by the Federal Environmental Pesticide Control Act. Two main groups of pesticides are specified: (1) general use and (2) restricted use. General use pesticides can be used by anyone. Restricted use pesticides can be used only by certified applicators. Certified applicators to use restricted materials may be licensed for private or commercial work. Violations of this act carry civil and criminal penalties.

Agricultural instruction at the high school level for work in entomology should be basic and develop a broad base of knowledge and skill. For example,

the use of simple hand tools should be taught. A current trend may be toward too much specialization in the lower levels of education.

Survey of New and Emerging Areas in Agribusiness from the Perspective of an Agricultural Economist. Dr. Tom Foster, Assistant Professor of Agricultural Economics, Mississippi State University, discussed agribusiness concepts. His remarks are summarized below.

Agribusiness is a farm all stretched out. In the early history of the United States the farms were self-sufficient. Four functions were performed on the farm: (1) making of farm supplies, (2) farming, (3) storage of crops, and (4) processing and distribution of crops. Agribusiness as it is today did not suddenly appear. It evolved over a period of many years. The development of communication and transportation systems, along with the existance of a free exchange market, led to specialization. There is a great interdependence between all sectors of agriculture and industry.

Predictions of the nature of agriculture in 1985 include an expansion of agribusiness activities, more industrialized inputs into farming, and fewer but larger farms with greater specialization in production.

Vocational education in agriculture needs to provide instruction which keeps pace with changes in agribusiness. The aim of the instruction should be changed to prepare youth for agribusiness occupations. Practical work experience is an essential element of the instruction. The relevance of certain FFA contests is to be questioned.

Training in high school agriculture classes should not focus on entrepreneural areas, but on working in agribusiness. Very few students go into immediate ownership of agribusinesses. Students need to become familiar with the basic concepts of management and business procedures, including labor relations and business law. Students should be taught the reality of job expectations - they do not become chiefs immediately. High school agriculture instruction should teach the fundamental or basic knowledge needed in agriculture. The basic sciences need to be taught and not just such things as fertilizer recommendations.

Survey of New and Emerging Areas in Agribusiness from the Perspective of an Agribusinessman. Mr. Paul Cheek, Marketing Training Specialist with MFC Services, Jackson, Mississippi, discussed his concept of agribusiness. A synopsis of his presentation follows.

All the early farmer had was soil and his hands. He relied on God and Mother Nature to take care of production. Nearly all agricultural activities centered on the farm. The farmer depended heavily upon family labor. Today, the farmer's role is much different. A knowledge of science and technology is required.

Agribusiness is defined as the sum total of all economic activity involved in supplying farmers with farm inputs, production of crops and livestock, and processing and distribution of farm output. It includes all factors which contribute to the growth of a product and its ultimate consumption. In any discussion of today's agriculture the role of mechanization must not be ignored.

Education is important. It is the key to successful management - both on the farm and in agribusiness.

Several Federal agencies and laws have come on the scene in recent years and are having tremendous impacts on agriculture. These include O.S.H.A. (Occupational Safety and Health Act), E.P.A. (Environmental Protection Act), IRS (Internal Revenue Service), and CLC (Cost of Living Council).

Survey of New and Emerging Areas in Environmental Protection. Presentations on environmental protection were made by Dr. David E. Wesley, Associate Professor of Wildlife and Fisheries, Mississippi State University, and Dr. George A. Hurst, Associate Professor of Wildlife and Fisheries, Mississippi State University. Their presentation focused on three areas of work: channelization, effect of pesticides on wildlife, and Ducks Unlimited.

Stream channelization is concerned with water manipulation and management. Three Federal agencies have been active in water management: Soil Conservation Service (SCS), Core of Engineers, and Bureau of Reclamation. The SCS and Core of Engineers have been largely responsible for the stream channelization projects in Mississippi. Channelization is said to have four purposes: (1) flood prevention, (2) restore stream flow and stabilize the soil, (3) increase farm productivity, and (4) enhance recreation. The cost-benefit ratio must be examined before any channelization project is undertaken. Channelization usually results in a large decline in fish population. In a study in North Carolina 90 percent of the fish were lost in 40 years following channelization. Before channelization is undertaken an environmental impact statement must be prepared. This statement is required by law on any water manipulation effort.

Land use is the key to wildlife populations. Experiments in pesticide use and pest eradication often involve monitoring for effects on wildlife. A recent example is the experiment to eradicate the boll weevil in a selected area in south Mississippi. Cotton pest management programs must be developed with the possible effects of the programs on wildlife in mind. Other areas of concern include the effect of (1) the clear cutting of timber on wildlife, (2) large fields in cultivation without wooded areas or turn rows, and (3) the build up of high pesticide concentrations. Some farmers are viewing wildlife as a cash crop. One example being a farm in south Mississippi where sportsmen may kill up to 12 quail after paying a 200 dollar per day fee.

Ducks Unlimited is concerned with the preservation of adequate duck populations. It is a private organization which, among other things, has funded the restoration of duck nesting areas in Canada. Approximately 80 percent of the waterfowl in the United States are hatched north of the U.S. border. Since tax money cannot be spent outside the U.S. on duck projects, Ducks Unlimited was formed to aid in restoring water areas for ducks. A Federal water bank program has functioned to restore water areas, primarily in the Dakotas.

Survey of New and Emerging Areas in Rural Land Use Planning and Development. Dr. Fred Tyner, Professor of Agricultural Economics, Mississippi State University, presented a survey of rural development concepts, strategies, and legislation. These are summarized on the following page.

Rural development is not new but is receiving increased attention, especially at the national level. Land use planning is an integral part of rural development. Rural development is concerned with expanding industries and jobs, education and job skills, and standard of living in rural areas. It includes five major areas: (1) community development, (2) human resource development, (3) economic resource development, (4) natural resource development, and (5) the disadvantaged people in rural areas.

Rural development is a process. It is concerned with problems that face rural areas, such as jobs, education, health services, and social services. The Rural Development Act of 1972 was a significant piece of legislation in stimulating rural development. A lack of funds has made a problem in implementation of the provisions of the Act.

There is a strong relationship between commercial agriculture and rural development. The amount of labor required in agriculture has declined causing damage to the economic structure of many small towns. This outflow of labor from the farms to the cities has also had an impact on the large cities.

C. D. Bishop of North Carolina State University has discussed the status of rural people. He indicates that rural people are disadvantaged. Rural students do not measure up to urban students in achievement. Bishop has further indicated that the training and education of youth contributes to the capability of a community for economic growth.

Survey of New and Emerging Areas in Agricultural Products/Processing. Dr. Joe Cardwell, Professor of Dairy Science, Mississippi State University, and Mr. Charles Shannon, Food Technologist with the Cooperative Extension Service, Mississippi State University, discussed new and emerging areas of agricultural products. This included a tour of the dairy manufacturing facilities at Mississippi State University, with specific attention to the techniques of manufacturing Edam cheese. A summary of their presentations follows.

The food processing industry is concerned with the manufacture of food products. By processing food in the State 100 percent can be added to the value of farm products. There are currently 436 processing plants in the State. These range from small one or two man operations up to operations with 1,500 employees. Meat processing, egg grading and marketing, dairy processing, crab and oyster packing, and poultry processing are the predominant areas of processing in the State.

Quality control and sanitation are important in food processing. Every processor must have a written plan for recalling food products at the consumer level. Inspection of plant facilities and the food products is important. Sanitation includes cleanliness; roach, mice, and other pest control; air filtering and quality; and equipment cleaning and maintenance.

Automation in processing techniques requires education and training of workers. The manufacturing of certain food products requires more skill than other products. For example, cheese manufacturing is much more complicated than ice cream and milk.

Program Planning in Agricultural Education for New and Emerging Areas in Agribusiness and Natural Resources. A discussion of procedures and techniques for planning programs to meet the needs in new and emerging areas of agribusiness and natural resources was led by Dr. W. F. Jackson, Professor and Head of Agricultural Education at Alcorn A & M College, and Dr. O. L. Snowden, Professor and Head of Agricultural Education at Mississippi State University. A brief summary of their discussion follows.

Program planning is an on-going process. Familiarity with the needs of agribusiness and the technical competencies required is essential for successful program planning. A good plan should indicate the goals, objectives, and aims of the instruction. Implementation of a plan is through the learning activities provided under the direction of the teacher. Evaluation is an integral part of program planning and should indicate how well the objectives have been achieved.

A written plan is important. It should provide for the inclusion of new and emerging areas. A written plan provides evidence that planning activities have been carried out. A good plan is flexible and provides for built-in evaluation. A state-wide curriculum would impede individual initiative in planning.

Planning involves predicting future problems with some degree of accuracy and determining possible solutions. Emphasis in planning should be on those matters related to the quality of human life. During the 1960's and early 1970's many pieces of legislation were enacted which have implications for planning programs dealing with the environmental aspects of human life.

Small Group Discussions on Planning Programs for New and Emerging Areas in Agriculture. Following the presentations by the resource persons, four committees were formed by the participants. The purpose of the committee sessions was to permit the informal discussion and exchange of ideas regarding the incorporation of instruction in the new and emerging areas into the local curriculum. Upon completion of the discussion sessions, a spokesman for each committee reported the highlights of the discussion in each committee.

Workshop Two

Workshop Two focused on summarizing and coordinating needed curriculum improvements in agricultural education and served as a follow up of previous workshops held for agriculture teachers through EPDA Sub-Projects. The workshop was held at Mississippi State University in the Conference Room of the Research and Curriculum Unit and lasted two days. Fourteen secondary teachers participated. The participants were selected on the basis of their participation in previous workshops or other curriculum involvement. The names of participants are listed below:

Charles Stuckey, Agriculture Teacher, Columbia
James Simmons, Agriculture Teacher, New Hope
A. E. Eichelberger, Agriculture Teacher, Newton
Freddie Owens, Agriculture Teacher, Morton
Arlon Cox, Agriculture Teacher, Smithville
Don Orr, Agriculture Teacher, Meadville
Wilbert Jordan, Agriculture Teacher, Waynesboro
Tom Clayton, Agriculture Teacher, Utica
Frank Fugitt, Agriulture Teacher, Morton
Charles Thames, Agriculture Teacher, Edinburg
Dwight Brown, Agriculture Teacher, Faulkner
Phillip Waycaster, Agriculture Teacher, Leland
Gary Taylor, Agriculture Teacher, Tishomingo
James Posey, Agriculture Teacher, Prentiss

Staff personnel involved in conducting the workshop were from the Vocational Division, State Department of Education; Agricultural Education Department, Alcorn A & M College; Agricultural Education Department, Mississippi State University; and Research and Curriculum Unit, Mississippi State University.

The agenda for this workshop was as follows:

AGENDA

Workshop on Summarizing and Coordinating
Studies in Curriculum Improvement
for Agricultural Education

August 14-15, 1973
Mississippi State University

August 14, 1973

1:00 - 2:45	Call to order and welcome	Jasper S. Lee
	Introduction of workshop participants	
	Details of workshop	Jasper S. Lee
	Details of travel and reimbursement	
	Purpose of workshop	T. E. Ellis
	Reports from workshop participants:	
	Assessing, Improving and Expanding Agricultural Education Programs and Services	Wilbert Jordon

	Inservice Development of Vocational Agriculture Teachers for Competencies in Agricultural Sales and Service; Agricultural Equipment Sales and Service; and Agricultural Management Programs	James Simmons and James Posey
	New and Emerging Areas of Agribusiness	Charles Stuckey
	New and Emerging Areas of Animal Science	J. D. Orr
	Youth and Leadership Development	Frank Fugitt
	New and Emerging Areas of Agricultural Mechanics	Phillip Waycaster
	Curriculum Development for Agricultural Education	Charles Thames
2:45 - 3:00	Break	
3:00 - 5:00	Continuation of reports from workshop participants Appointment of committees	
	Agribusiness	B. B. Robbins, Staff Representative James Simmons Freddie Owens A. E. Eichelberger
	Livestock	Glenn See, Staff Representative Arlon Cox Don Orr Wilbert Jordon Tom Clayton
	Agricultural Mechanics	Raymond Brown, Staff Representative Phillip Waycaster Gary Taylor James Posey
	Meeting by committees	
5:00	Make room assignments and issue keys	
7:00	Speech: Agriculterse and Agricultural Education	Carl Loftin

August 15, 1973

8:30 - 10:00	Meeting by committees	
10:00 - 10:15	Break	
10:15 - 11:45	Meeting by committees	
11:45 - 1:00	Lunch	
1:00 - 3:00	Reports from committees Workshop summary Adjourn	Jasper S. Lee

The following questions were developed to assist in providing direction to committee discussion:

1. What are the most critical needs of agricultural education in Mississippi today?

2. How can the needs in agricultural education best be met?

3. What would be your evaluation of the workshops held this summer?

4. What areas should receive attention in future workshops?

5. How can personnel on the State staff, in teacher education, and with the Research and Curriculum Unit be of greatest help to you?

This workshop provided an opportunity for a great deal of interaction between participants and between participants and staff representatives on the status and trends in curriculum for agricultural education. The discussions and plans were focused on problems that would arise in providing instruction in agricultural education to meet local needs. Ways in which staff representatives could assist teachers in implementing improved instructional programs were discussed.

Project Outcomes

Phase One of this project permitted teachers to develop competencies in planning programs for new and emerging areas of agribusiness and natural resources. Some specific outcomes of the project were as follows:

1. Familiarized teachers with new concepts in various areas of agriculture, such as insect control and pesticide usage.

2. Developed familiarity with new and emerging areas of agribusiness, products/processing, rural development, and environmental protection.

3. Acquainted teachers with procedures for planning instructional programs that meet the needs of students in new and emerging areas of agriculture.

4. Permitted teachers to discuss strategies for implementing

instruction in new and emerging areas of agriculture.

5. Permitted teachers to express concerns about problems in providing instruction in the new and emerging areas of agriculture.

6. Provided an opportunity for the follow-up of previous workshop held during the year.

7. Permitted teachers to review and evaluate existing materials for planning programs and local curriculum development.

Problems Encountered

No real problems were encountered in the conduct of the project. The greatest problem was in securing participation by personnel responsible for the administration of vocational education programs on the local level. This was probably due in part to their involvement in local administrative matters which made it impossible for them to be away.

Dissemination Activities

The dissemination activities in this project involved the distribution of a number of bulletins, information sheets, and similar materials. The titles of some of these materials are as follows:

"Rural Development Act of 1972 - Fact Sheet"
Reprint of "Progress and Plans for Implementation of Rural Development Act of 1972," Report of Subcommittee on Rural Development.
"Rural Areas: Urgent Considerations for Development," Staff Paper, Department of Agricultural Economics, Mississippi State University.
Miscellaneous handouts on the evolution and meaning of agribusiness.
Various bulletins and fact sheets on insects and insect control.
Various information sheets on plant diseases.
Models for use by agriculture teachers in preparing a summer itinerary.

Evaluation Activities

Evaluation of the project included observation by project staff and written statements of evaluation by participants. The project staff felt that the activities in Phase One were very successful. Participants generally shared the same reactions. Some comments written by the teachers are as follows:

"This was a very good workshop."
"Should have been expanded to include more teachers."
"The best workshop I have been in."
"The information has been up to date and very good."
"Many very important items were brought up and much was learned."
"This was a very well planned workshop."
"This is the first workshop I have participated in and, being a new teacher, it has been of tremendous benefit to me."
"Every agriculture teacher in the State should have been at this workshop."

"There should be more workshops."

Follow-Up Activities

The follow-up activities of this project being conducted by the staff include (1) the calling a committee meeting by the State Supervisor of Agricultural Education composed of representatives from several different workshops held during the year and (2) follow-up through routine supervisory visits during the next school year. The committee meeting was identified as "Workshop Two" in Phase One of this project. It provided an opportunity for participants to discuss, review and evaluate "Workshop One," Phases Two and Three of this Project, and other projects.

Since all supervisory personnel were involved in this project, follow-up activities will be a routine part of their supervision activities. Also, several teacher educators were involved and should be able to follow-up the project during pre-service and in-service teacher education efforts.

Recommendations

Several recommendations for future workshops, materials development, and teacher education activities grew out of this workshop. Some of these are listed below as given by project participants and staff:

Hold a workshop for teachers on agricultural chemicals and pesticides.
Hold a workshop for teachers on job placement and occupational experience programs.
Hold a workshop for teachers on agricultural products/processing.
Hold a workshop on agribusiness.
Hold a workshop on up dating the agricultural mechanics program.
Hold a workshop on public relations.
Develop job operation sheets to cover all areas of agricultural mechanics.
Develop a procedure whereby college credit can be earned for participation in in-service workshops.

REFER TO REQUISITION #1

Req. #2

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202
EDUCATIONAL PERSONNEL DEVELOPMENT PROGRAMS

BUDGET AND FINANCIAL REPORT

FORM APPROVED
BUDGET BUREAU NO. 51-R0394

GRANT/CONTRACT NUMBER
002525 (AG-4)

TITLE OF PROGRAM REPORTED: Workshops for Developing Competency of Instructors in New & Expanding Areas of Curriculum in Agribusiness & Natural Resources

NAME AND ADDRESS OF INSTITUTION (City, State, ZIP Code):
Mississippi State Board for Voc. Education
P. O. Box 771 Jackson, Mississippi 39205

	A. DIRECT COST-ADMINISTRATIVE & INSTRUCTIONAL STAFF SALARIES		BUDGETED	EXPENDED	BALANCE
1	DIRECTOR				
2	SECRETARIAL AND CLERICAL				
3	OTHER ADMINISTRATIVE SUPPORTING STAFF				
4	FULL-TIME INSTRUCTORS	NO.			
5	PART-TIME INSTRUCTORS	NO. 3			
6	LABORATORY ASSISTANTS	NO.			
7	INSTRUCTIONAL ASSISTANTS	NO.			
8	LECTURERS AND/OR CONSULTANTS	NO. 7			
9	*SUBTOTAL FOR SALARIES (Sum of Lines 1 through 8)*				
	B. OTHER DIRECT COSTS				
10	EMPLOYEE SERVICES AND BENEFITS				
11	TRAVEL		104.00	-0-	104.00
12	OFFICE SUPPLIES, DUPLICATING, PUBLICITY, COMMUNICATIONS				
13	INSTRUCTIONAL SUPPLIES, ETC.				
14	REQUIRED FEES				
15	EQUIPMENT RENTAL AND/OR DEPRECIATION (if applicable)				
16	*SUBTOTAL FOR OTHER DIRECT COSTS (Sum of Lines 10 thru 15)*				
17	TOTAL DIRECT COSTS *(Sum of Lines 9 and 16)*				
	C. STIPEND SUPPORT *(Federal participants)*				
18	PARTICIPANTS ~~XXXX~~ travel	NO. 24	$1896.00	1862.07 ~~$1840.02*~~	~~55.98~~ $ ~~159.98~~ 33.93
19	DEPENDENTS PAID	NO.			
20	TOTAL STIPEND SUPPORT *(Sum of Lines 18 and 19)*		$1896.00	1,862.07	33.93
21	TOTAL DIRECT AND STIPEND COSTS *(Sum of Lines 17 and 20)*		$2000.00	1,862.07	137.93
22	INDIRECT COSTS *(8 percent of Line 21)*		Waived		
23	**GRAND TOTAL** *(Sum of Lines 21 and 22)*		$2000.00	1,862.07	137.93

TYPED NAME OF DIRECTOR	SIGNATURE OF DIRECTOR	DATE SIGNED
T. E. Ellis	T E Ellis	9-5-73
TYPED NAME AND TITLE OF FINANCIAL OFFICER	SIGNATURE OF FINANCIAL OFFICER	DATE SIGNED
George LaFollette		

OE FORM 7203 5-68 REPLACES OE FORM 4011, WHICH IS OBSOLETE.

*REFER TO REQUISITION #1

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

BUDGET BUREAU NO. 51-R0752
APPROVAL EXPIRES: 10/31/71

PARTICIPANT DATA SUMMARY

(Parts C, D, and F, Education Professions Development Act
Title V, P.L. 89-329, as amended)

1. OE PROJECT NUMBER: 002525 (AG-4)

2 NAME OF SPONSORING INSTITUTION OR AGENCY: Mississippi State Board for Vocational Education

3. STATE: Mississippi

4. a. NUMBER OF PARTICIPANTS TO BE TRAINED IN THE PROJECT: 24

b. NUMBER OF PARTICIPANTS COVERED BY THIS SUMMARY REPORT: 24

DATA ON PARTICIPANTS

5. SEX		6. AGE						7. PARTICIPANTS BY WHETHER OR NOT THEY ARE VIETNAM ERA VETERANS	
		a. under 25	5	d. 35-39	4	g. 50-54	4		
a. Male	24	b. 25-29	5	e. 40-44	0	h. 55-59	1	a. Vietnam era veterans	
b. Female		c. 30-34	4	f. 45-49	1	i. 60 and over	0	b. Not Vietnam era veterans	

8. RACIAL OR ETHNIC BACKGROUND				9. PARTICIPANTS BY WHETHER THEIR INCOMES ARE, OR WERE BEFORE THEY ENROLLED IN THIS PROJECT, BELOW THE POVERTY LINE	
a. Negro or black	6	d. American Indian			
b. Puerto Rican		e. Oriental		a. Below poverty line	
c. Mexican-American		f. Other than the above	18	b. Not below poverty line	X

10. GEOGRAPHIC DISTRIBUTION OF PARTICIPANTS *(by State of employment prior to this project)*

a. Ala.		k. Ga.		u. Md.		aa. N. J.		ao. S. C.		ay. Wyo.	
b. Alaska		l. Hawaii		v. Mass.		af. N. M.		ap. S. D.		az. Canal Zone	
c. Ariz.		m. Idaho		w. Mich.		ag. N. Y.		aq. Tenn.		ba. Guam	
d. Ark.		n. Illinois		x. Minn.		ah. N. C.		ar. Texas		bb. Puerto Rico	
e. Cal.		o. Indiana		y. Miss.	X	ai. N. D.		as. Utah		bc. Virgin Is.	
f. Colo.		p. Iowa		z. Mo.		aj. Ohio		at. Vt.		bd. Pacific Trust Territories	
g. Conn.		q. Kansas		aa. Mont		ak. Okla.		au. Va.			
h. Del.		r. Ky.		ab. Nebr.		al. Oreg.		av. Wash.		be. Overseas Dep. Schools	
i. D. C.		s. La.		ac. Nevada		am. Pa.		aw. W. Va.			
j. Fla.		t. Maine		ad. N. H.		an. R. I.		ax. Wisc.		bf. Foreign	

11. HIGHEST DEGREE EARNED

a. NONE	b. H. S. DIPLOMA	c. BACHELOR'S	d. MASTER'S	e. ED. D.	f. PH. D.
		16	8		

12. OCCUPATIONAL BACKGROUND

a. Currently employed *(or within the past 5 years employed)* in the field of education	24	d. Never previously employed in the field of education by whether they were	
b. Previously employed in the field of education, but not within the past 5 years		1. Employed in other professions requiring an academic degree	
c. Never previously employed in the field of education		2. Holding an academic degree but not working	
		3. Not holding an academic degree	

13. TOTAL YEARS OF TEACHING OR OTHER EMPLOYMENT IN THE FIELD OF EDUCATION

a. NONE	b. 1-4 YEARS	c. 5-9 YEARS	d. 10-14 YEARS	e. 15-19 YEARS	f. 20 OR MORE
4	3	9	2	0	6

14. PRIMARY POSITION OR EMPLOYMENT STATUS AT PRESENT, OR IMMEDIATELY PRIOR TO PROJECT

a. IN A PRESCHOOL, ELEMENTARY OR SECONDARY SCHOOL OR SCHOOLS, OR LOCAL EDUCATION AGENCY				b. OTHERWISE EMPLOYED	
				1. Teacher trainer *(in institution of higher education)*	
1. Teacher	24	5. Instructional media *(incl. librarians)*			
2. Administrator		6. Education aide or paraprofessional		2. In State educ. agency	
3. Supervisor		7. School volunteer		3. Non-education position	
4. Pupil personnel specialist		8. Other education position		4. Student	

OE FORM 7214, 6/70 REPLACES OE FORM 7214, 6/69, WHICH IS OBSOLETE.

DATA ON SCHOOLS OF PARTICIPANTS

(NOTE: Distribute into each of the following items (15, 16, 17, 18, 19a, 19b, 19c, 19d, and 19e) only the number of participants who have been classified in item 14a, by the category in each item which best describes the nature of their schools. Exclude participants classified in item 14b.)

15. SCHOOL OF SYSTEM, BY CONTROL		16. GRADE LEVELS WITH WHICH THE PARTICIPANTS' ASSIGNMENTS USUALLY RELATE					
		a. Preschool		d. Jr. High (7-9)		g. Elem. & Sec.	
a. Public	X	b. K - Gr 3		e. Sr. High (10-12)	X	h. Post-Sec. Vocational	
b. Nonpublic		c. Elem (K-6)		f. Secondary (7-12)		i. Adult Education	

17. AREA OF SERVICE OF SCHOOL OR SYSTEM WHERE EMPLOYED *(predominant characteristic)*

a. Rural or small town - general population	X	d. Urban - poverty area	
b. Rural or small town - poverty area		e. Suburban	
c. Urban - general population			

18. STUDENT BODY OF SCHOOL *(or schools)* IN TERMS OF THE PERCENT WHO COME FROM FAMILIES AT OR BELOW THE POVERTY LINE

a. 0%		d. 20-29%		g. 50-59%		j. 80-89%	
b. 1-9%	X	e. 30-39%		h. 60-69%		k. 90-100%	
c. 10-19%		f. 40-49%		i. 70-79%			

19. STUDENT BODY OF SCHOOL *(or schools)* IN TERMS OF THE PERCENT WHO COME FROM SPECIFIED MINORITY RACIAL OR ETHNIC BACKGROUNDS

A. NEGRO OR BLACK		B. PUERTO RICAN		C. MEXICAN-AMERICAN		D. AMERICAN INDIAN		E. ORIENTAL	
a. 0%		a. 0%		a. 0%		a. 0%		a. 0%	
b. 1-9%	X	b. 1-9%		b. 1-9%		b. 1-9%		b. 1-9%	
c. 10-19%		c. 10-19%		c. 10-19%		c. 10-19%		c. 10-19%	
d. 20-29%		d. 20-29%		d. 20-29%		d. 20-29%		d. 20-29%	
e. 30-39%		e. 30-39%		e. 30-39%		e. 30-39%		e. 30-39%	
f. 40-49%		f. 40-49%		f. 40-49%		f. 40-49%		f. 40-49%	
g. 50-59%		g. 50-59%		g. 50-59%		g. 50-59%		g. 50-59%	
h. 60-69%		h. 60-69%		h. 60-69%		h. 60-69%		h. 60-69%	
i. 70-79%		i. 70-79%		i. 70-79%		i. 70-79%		i. 70-79%	
j. 80-89%		j. 80-89%		j. 80-89%		j. 80-89%		j. 80-89%	
k. 90-100%		k. 90-100%		k. 90-100%		k. 90-100%		k. 90-100%	

AREA OF SPECIALIZATION *(If employed in an institution of higher education)*

20. PARTICIPANTS EMPLOYED IN INSTITUTIONS OF HIGHER EDUCATION - THOSE PARTICIPANTS DISTRIBUTED IN THE FIRST CATEGORY OF ITEM 14b, AS "TEACHER TRAINERS" - BY AREA OF SPECIALIZATION NONE

a. ARTS OR SCIENCES	b. EDUCATION	c. OTHER

TYPE OF POSITION FOR WHICH PARTICIPANTS ARE PREPARING

21. ALL PARTICIPANTS BY WHETHER THIS PROJECT IS PREPARING THEM TO ENGAGE IN A DIFFERENT TYPE OF POSITION

a. Preparing for same type of position as at present *(as reported in item 14)*	24
b. Preparing for a different type of position *(include teachers who are preparing to teach a different subject)*	

c. Participants in category b. above by type of position being prepared for

1. Teacher *(of a different subject)*		6. Educational aide or paraprofessional	
2. Administrator		7. School volunteer	
3. Supervisor		8. Other educational position *(in a school)*	
4. Pupil personnel specialist		9. Teacher trainer *(in an institution of higher education)*	
5. Instructional media specialist *(including librarian)*			